CLAIMS:

1. A deposition method comprising:

forming a nucleation layer exhibiting a first value of an electrical property over a substrate;

forming a layer of a first substance at least one monolayer thick chemisorbed on the nucleation layer; and

forming a layer of a second substance at least one monolayer thick chemisorbed on the first substance, a chemisorption product of the first and second substances comprising a deposition layer exhibiting a second value of the electrical property and the deposition layer and nucleation layer combined exhibiting a third value of the electrical property more near the second value than the first value.

2. The deposition method of claim 1 wherein the first and second substance layers each consist essentially of a monolayer.

3. The deposition method of claim 1 wherein the deposition layer comprises silicon and nitrogen.

4. The deposition method of claim 1 wherein the nucleation layer comprises a compound the same as a deposition product of the first and second substance.

5. The deposition method of claim 1 wherein the nucleation layer comprises an approximately homogeneous composition.

6. The deposition method of claim 1 wherein a thickness of the nucleation layer comprises less than about 20 Angstroms.

7. The deposition method of claim 1 wherein the nucleation layer comprises silicon nitride, aluminum oxide, or tantalum oxide.

8. The deposition method of claim 1 wherein the third value and the second value are approximately equal.

9. A low selectivity deposition method comprising:

forming a first part of a nucleation layer on a first surface of a substrate;

forming a second part of a nucleation layer on a second surface of the substrate; and

forming a deposition layer on the first and second parts of the nucleation layer substantially non-selectively on the first part of the nucleation layer compared to the second part, even though the first and second surfaces of the substrate exhibit a property of the deposition layer forming less readily on the first surface compared to the second surface.

10. The deposition method of claim 9 wherein the forming the first and the second part of the nucleation layer occurs by chemical vapor deposition.

11. The deposition method of claim 9 wherein the forming the first and the second part of the nucleation layer occurs by atomic layer deposition.

12. The deposition method of claim 11 wherein the atomic layer deposition comprises contacting the substrate with only one precursor specie at a time.

13. The deposition method of claim 9 wherein the forming the first and the second part of the nucleation layer occurs simultaneously.

14. The deposition method of claim 9 wherein the forming the first and the second part of the nucleation layer occurs simultaneously and the nucleation layer forms substantially non-selectively on the first surface of the substrate compared to the second surface.

15. The deposition method of claim 9 wherein the forming the deposition layer is performed *in situ* of the forming the first and the second part of the nucleation layer.

16. The deposition method of claim 9 wherein the second part of the nucleation layer comprises a plurality of components also comprised by the first part.

17. The deposition method of claim 9 wherein the first and the second parts of the nucleation layer comprise silicon nitride, aluminum oxide, or tantalum oxide.

18. The deposition method of claim 9 wherein the first and the second parts of the nucleation layer consist essentially of same components in approximately same proportions.

19. The deposition method of claim 9 wherein a composition of the first part of the nucleation layer differs from a composition of the second part of the nucleation layer.

20. The deposition method of claim 9 wherein the first and the second parts of the nucleation layer comprise silicon nitride and the first part further comprises oxygen.

21. The deposition method of claim 9 wherein a thickness of the nucleation layer comprises less than about 20 Angstroms.

22. The deposition method of claim 21 wherein the thickness comprises less than about 6 Angstroms.

23. The deposition method of claim 9 wherein a thickness of the first part of the nucleation layer is greater than 50% of a thickness of the second part.

24. The deposition method of claim 23 wherein the thickness of the first part is greater than 80% of the thickness of the second part.

25. The deposition method of claim 9 wherein the deposition layer comprises a chemisorbed first specie at least one monolayer thick.

26. The deposition method of claim 25 wherein the first surface of the substrate exhibits a property of chemisorbing the first specie at a slower rate compared to the second surface.

27. The deposition method of claim 25 further comprising forming a layer at least one monolayer thick of a chemisorbed second specie different from the first specie on the first specie layer.

28. The deposition method of claim 27 wherein the first and second specie layers each consists essentially of a monolayer.

29. The deposition method of claim 27 wherein the first and second specie layers, in combination, comprise silicon and nitrogen.

30. The deposition method of claim 27 wherein the nucleation layer comprises a material also comprised by the first and second specie layers combined.

31. A low selectivity deposition method comprising:

simultaneously forming a first part of a nucleation layer on an insulative oxide material and a second part of the nucleation layer on a semiconductive material; and

contacting the nucleation layer with an initiation precursor and forming an initiation layer at least one monolayer thick on the first and second parts of the nucleation layer substantially non-selectively on the first part of the nucleation layer compared to the second part.

32. The deposition method of claim 31 wherein the initiation layer consists essentially of a monolayer.

33. The deposition method of claim 31 wherein the first and the second parts of the nucleation layer consist essentially of same components in approximately same proportions.

34. The deposition method of claim 31 wherein the first and the second parts of the nucleation layer comprise silicon nitride and the first part further comprises oxygen.

35. The deposition method of claim 31 wherein a thickness of the nucleation layer comprises less than about 20 Angstroms.

36. The deposition method of claim 31 wherein a thickness of the first part of the nucleation layer is greater than about 50% of a thickness of the second part.

37. The deposition method of claim 31 wherein the insulative oxide exhibits a property of chemisorbing the initiation precursor at a slower rate compared to the semiconductive material.

38. The deposition method of claim 31 further comprising contacting the initiation layer with at least one deposition precursor and forming a deposition layer at least one monolayer thick on the initiation layer.

39. The deposition method of claim 38 wherein the deposition layer consists essentially of a monolayer.

40. The deposition method of claim 38 wherein the deposition precursor consists essentially of a single precursor specie.

41. The deposition method of claim 38 wherein the initiation and deposition layers, in combination, comprise silicon and nitrogen, or tantalum and oxygen, or aluminum and oxygen.

42. A low selectivity deposition method comprising:

forming a nucleation layer comprising silicon and nitrogen substantially non-selectively on a first and a second surface of a substrate;

forming a monolayer of a first substance chemisorbed on the nucleation layer;

forming a monolayer of a second substance chemisorbed on the first substance, wherein a chemisorption product of the first and second substances comprises silicon nitride.

43. The deposition method of claim 42 wherein the nucleation layer comprises silicon nitride and a nucleation layer part that is over the first surface further comprises oxygen.

44. The deposition method of claim 42 wherein a thickness of the nucleation layer comprises less than about 20 Angstroms.

45. The deposition method of claim 42 wherein a thickness of a nucleation layer part that is over the first surface is greater than 50% of a thickness a nucleation layer part that is over the second surface.

46. The deposition method of claim 42 wherein the first surface of the substrate exhibits a property of chemisorbing the first substance at a slower rate compared to the second surface.

47. A low selectivity deposition method comprising atomic layer depositing a nucleation substance chemisorbed on a first surface and a second surface of a substrate substantially non-selectively, wherein the first surface exhibits a property of chemisorbing an atomic layer deposition precursor at a slower rate compared to the second surface and the nucleation substance exhibits a property of chemisorbing the precursor at an approximately equal rate over the first surface compared to over the second surface.

48. The deposition method of claim 47 wherein the nucleation substance comprises an approximately homogeneous composition over the first and the second surface.

49. The deposition method of claim 47 wherein the nucleation layer comprises silicon nitride and a nucleation layer part that is over the first surface further comprises oxygen.

50. The deposition method of claim 47 wherein a thickness of the nucleation layer comprises less than about 20 Angstroms.

51. The deposition method of claim 47 wherein a thickness of a nucleation layer part that is over the first surface is greater than 50% of a thickness a nucleation layer part that is over the second surface.

52. A low selectivity deposition method comprising:

placing a substrate in a deposition chamber;

forming a first part of a nucleation layer on a first surface of the substrate in the chamber;

forming a second part of a nucleation layer on a second surface of the substrate in the chamber; and

without removing the substrate from the chamber, forming a layer at least one monolayer thick of a first chemisorbed precursor on the first and second parts of the nucleation layer substantially non-selectively on the first part of the nucleation layer compared to the second part.

53. The deposition method of claim 52 wherein the forming the first and the second part of the nucleation layer occurs simultaneously and the nucleation layer forms substantially non-selectively on the first surface of the substrate compared to the second surface.

54. The deposition method of claim 52 wherein the first surface of the substrate exhibits a property of chemisorbing the first precursor at a slower rate compared to the second surface.

55. The deposition method of claim 52 wherein the first surface comprises borophosphosilicate glass and the second surface comprises polysilicon.

56. A low selectivity deposition method comprising:

placing a substrate in a first chamber;

forming a first part of a nucleation layer on a first surface of the substrate in the first chamber;

forming a second part of a nucleation layer on a second surface of the substrate in the first chamber;

removing the substrate from the first chamber and placing it in a second chamber different from the first; and

forming a layer of a first chemisorbed specie at least one monolayer thick on the first and second parts of the nucleation layer in the second chamber substantially non-selectively on the first part of the nucleation layer compared to the second part.

57. The deposition method of claim 56 wherein the forming the first and the second part of the nucleation layer occurs simultaneously and the nucleation layer forms substantially non-selectively on the first surface of the substrate compared to the second surface.

58. The deposition method of claim 56 wherein the first surface of the substrate exhibits a property of chemisorbing the first specie at a slower rate compared to the second surface.

59. The deposition method of claim 56 wherein the first surface comprises borophosphosilicate glass and the second surface comprises polysilicon.